

July 25, 2012

**VIA ELECTRONIC FILING**

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th St. S.W.  
Washington, D.C. 20554

**Re: Promoting Expanded Opportunities for Radio Experimentation and Market Trials Under Part 5 of the Commission's Rules and Streamlining Other Related Rules, ET Docket 10-236**

**2006 Biennial Review of Telecommunications Regulations – Part 2 Administered by the Office of Engineering and Technology, ET Docket 06-155**

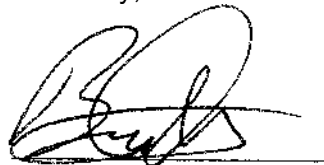
**Permitted Oral *Ex Parte* Presentation**

Dear Ms. Dortch:

On July 23, 2012, on behalf of The Boeing Company ("Boeing"), we filed the attached *ex parte* notice referencing a meeting that was held with the Commission staff on July 19, 2012. The notice referenced talking points that were distributed during the meeting but, due to an inadvertent error, a copy of the talking points was not attached to the notice. The complete notice, with the talking points, is provided as an attachment to this letter.

Please let us know if you have any questions about this matter.

Sincerely,



Bruce A. Olcott  
Counsel to The Boeing Company

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**Permitted Oral *Ex Parte* Presentation**

Dear Ms. Dortch:

On July 19, 2012, representatives of The Boeing Company ("Boeing") met with representatives of the Commission staff to discuss the above-captioned proceeding on creating increased opportunities for the use of wireless spectrum for experiments and innovation. Attending the meeting on behalf of the Commission were Ira Keltz, Deputy Chief of the Office of Engineering and Technology ("OET"), Bruce Romano, OET Associate Chief, and Geraldine Matise, Chief of the OET Policy and Rules Division. Attending the meeting on behalf of Boeing were Audrey Allison, Joseph Cramer, John Garcia Jr., and the undersigned. The attached talking points were distributed during the meeting.

Most of the discussion was focused on reducing the incidence in which coordination and consent conditions are imposed on experimental licenses issued by OET. Section 5.85(e) of the Commission's rules instructs that OET "may, at its discretion" impose coordination requirements on experimental licenses.<sup>1</sup> In recent years, however, coordination requirements have not been employed with discretion, but instead are routinely imposed on the experimental use of numerous spectrum bands regardless of whether coordination is warranted by the nature of the experimental operations. In part because of this, Recommendation 7.7 of the National

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<sup>1</sup> 47 C.F.R. § 5.85(e).

Broadband Plan advocates permitting experimental use of spectrum “without individual coordination of frequencies, conditioned on not causing harmful interference.”<sup>2</sup> For example, Boeing advocates the use of notification rather than coordination requirements for experimental operations that do not pose an appreciable risk of harmful interference to other licensees.

The parties also discussed attempts by at least one major licensee to charge relatively substantial fees for reviewing and approving experimental coordination requests. Boeing noted that such fees, if widely imposed by wireless licensees, would rapidly escalate the cost of wireless experimentation beyond the capabilities of many research organizations, invariably stifling innovation. Even for those organizations that could absorb the additional costs, the significantly increased expenses would result in the development of fewer new products and higher prices for consumers for those new wireless products that are developed. Further, if the charging of coordination fees becomes the norm in the experimental service, such a “payment for approval” process would likely spread to other communications service, significantly harming those services that depend on rapid and efficient coordination to promote robust spectrum sharing, such as fixed microwave and satellite services, to name a few.

The Commission clearly has the statutory authority to prohibit licensees from charging fees for reviewing and approving coordination requests. Licensees, even those taking their licenses through auction, do not acquire an ownership interest in their licensed spectrum.<sup>3</sup> Nor does the issuance of a license override the Commission’s proper exercise of its regulatory power over spectrum to promote the “public interest, convenience, and necessity.”<sup>4</sup> The Commission is empowered to obligate spectrum users to devote part of their spectrum usage to the public interest,<sup>5</sup> and indeed has employed its authority over spectrum by requiring licensees, for example, to cooperate to facilitate data roaming.<sup>6</sup> Experimental operations greatly serve the public interest by promoting advanced capabilities and greater spectrum efficiency, and streamlining the current cumbersome experimental licensing process has the potential to increase the pace and breadth of development.

Finally, the Boeing representatives discussed their proposal for a coordination safe harbor in which experimental license applicants that qualify for safe harbor treatment would be

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<sup>2</sup> *Connecting America: The National Broadband Plan*, Federal Communications Commission, Recommendation 7.7, March 2010 (“*National Broadband Plan*”) (available at <http://www.broadband.gov/download-plan/>).

<sup>3</sup> See 47 U.S.C. § 301; see also *Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies To Provide Spectrum-Based Services*, 2000 Biennial Regulatory Review *Spectrum Aggregation Limits For Commercial Mobile Radio Services Increasing Flexibility To Promote Access to and the Efficient and Intensive Use of Spectrum and the Widespread Deployment of Wireless Services, and To Facilitate Capital Formation*, Report and Order and Further Notice of Proposed Rulemaking, FCC 04-166, ¶ 84 (rel. Sept. 27, 2004); *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers and Other Providers of Mobile Data Services*, Second Report and Order, FCC 11-52, ¶ 62 and n.169 (rel. April 7, 2011) (“*Second Report and Order*”).

<sup>4</sup> 47 U.S.C. § 316.

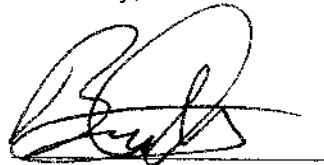
<sup>5</sup> See *In the Matter of Public Interest Obligations of TV Broadcast Licensees*, MM Docket No. 99-360, Notice of Inquiry, FCC 99-390, ¶ 2 (Dec. 20, 1999).

<sup>6</sup> *Second Report and Order*, ¶ 40, 61-64.

exempt from coordination and consent requirements.<sup>7</sup> Pursuant to Boeing's proposal, experimental license applicants could qualify for safe harbor treatment by showing that the radiated emissions from their experimental operations would be at or below the Section 15.109(b) power levels at the edges (fence line) of a controlled test area. The safe harbor would apply to all types of licenses, including standard experimental licenses, applications for special temporary authority ("STA"), and any of the new program experimental licenses adopted through the Commission's pending experimental licensing proceeding in which this letter is filed.

Although Boeing's safe harbor proposal could relieve some of the burden caused by the excessive use of coordination requirements on experimental licenses, the proposal alone would not resolve the current problem. A substantial number of experimental operations are unlikely to qualify for safe harbor treatment and yet will present such a low risk of harmful interference that coordination requirements are not necessary or appropriate. Thus, the Commission should focus the bulk of its efforts on limiting its imposition of coordination and consent requirements to only those experimental operations that pose an appreciable risk of harmful interference. In contrast, the vast majority of experimental licensees should be required solely to provide advance notification to primary licensees authorized to use the same spectrum in a particular location, and to cease operations immediately in the event of a complaint of harmful interference. Such measures would truly serve the goals of the National Broadband Plan and the Commission's Notice of Proposed Rulemaking in this proceeding by creating "more flexible experimental licensing rules"<sup>8</sup> in order to "shorten the time it takes to transform concepts into consumer products and to bring ideas from the lab to the marketplace."<sup>9</sup>

Sincerely,

A handwritten signature in black ink, appearing to read "Bruce A. Olcott", written over a horizontal line.

Bruce A. Olcott  
Counsel to The Boeing Company

cc: I. Keltz  
B. Romano  
G. Matise

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<sup>7</sup> See Letter from Bruce A. Olcott, Counsel, The Boeing Company, to Marlene H. Dortch, Secretary, Federal Communications Commission, ET Docket Nos. ET Docket 10-236 and ET Docket 06-155 (filed July 9, 2012); Letter from Bruce A. Olcott, Counsel, The Boeing Company, to Marlene H. Dortch, Secretary, Federal Communications Commission, ET Docket Nos. ET Docket 10-236 and ET Docket 06-155 (filed May 2, 2012).

<sup>8</sup> *National Broadband Plan*, Recommendation 7.7.

<sup>9</sup> *Promoting Expanded Opportunities for Radio Experimentation and Market Trials under Part 5 of the Commission's Rules and Streamlining Other Related Rules*, ET Docket No. 10-236, 2006 Biennial Review of Telecommunications Regulations – Part 2 Administered by the Office Of Engineering and Technology (OET), ET Docket No. 06-105, Notice of Proposed Rulemaking, FCC 10-197, ¶ 11 (rel. Nov. 30, 2010) ("*NPRM*").

**PART 5 EXPERIMENTATION NPRM**

**THE BOEING COMPANY**

**JULY 2012**

- The National Broadband Plan (Recommendation 7.7) advocates “more flexible experimental licensing rules” to facilitate the use of spectrum by researchers
  - Its Recommendations include permitting experimentation “without individual coordination of frequencies, conditioned on not causing harmful interference”
- The NPRM seeks ways to use experimental licenses “to shorten the time it takes to transform concepts into consumer products and to bring ideas from the lab to the marketplace”

**Excessive Coordination Requirements**

- As Boeing has repeatedly explained, widespread imposition of coordination requirements on experimental licensees significantly hampers and delays (or prevents) experimental testing
  - Coordination is often unnecessary because many experimental operations are conducted at very low power levels for brief periods in remote locations
  - Primary licensees lack adequate incentive to promptly approve coordination requests

**Coordination Approval Fees**

- Any proposal permitting individual licensees to charge fees for reviewing coordination requests could rapidly elevate the costs of experimentation, invariably stifling innovation
  - Boeing, for example, currently has about 175 active experimental licenses, most of which include coordination and consent obligations
  - Boeing’s licenses often cover many frequencies and require coordination with multiple licensees in such services as CMRS, AWS, WCS, BRS, FS, and broadcast
  - Coordination with microwave licensees can require contacting 40-50 different users
  - Coordination approval fees of up to \$4,000 per licensee (as proposed by one licensee) could rapidly become prohibitively expensive and burdensome
- Once approved, coordination fees could quickly extend to non-experimental radio services

**Safe Harbor Approach**

- Boeing proposes to exempt from coordination any experimental license application in which RF transmissions will not exceed § 15.109(b) levels at the fence line of a controlled test area
  - Such authorizations do not require coordination because they would pose no more risk of interference than unlicensed ubiquitously deployed unintentional radiators
  - Boeing’s safe harbor proposal would not solve the problem of excessive coordination requirements, but it would help to reduce a portion of the burden on researchers